

Rec'd PCT/PPO 20 SEP 2005

PATENT

Attorney Docket 051530-5008

H6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Vernon L. Alvarez et al.**

Application No. **10/522,810**

International Filing Date: **June 2, 2003**

Date of Entry into U.S. National Stage: **January 31, 2005**

Examiner: **Not Assigned**

Art Unit: **1646**

For: **Treatment of Cell Proliferative Disorders With Chlorotoxin**

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(b)**

Pursuant to 37 C.F.R. 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO-1449 forms. This Information Disclosure Statement is being filed, to the best of the undersigned's knowledge, before the mailing date of a first Office Action on the merits for the above-referenced application. Accordingly, Applicants do not believe that a fee is due with the filing of this paper.

Copies of the listed documents are attached. The present application is a U.S. National Phase Application of International Patent Application PCT/US03/17411 (filed June 2, 2003). Documents aa, ag, and aj were cited in the International Search Report which issued in International Patent Application PCT/US03/17411.

Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute prior art. If the Examiner applies any one of the documents as prior art against any claim in the application, and Applicants determine that the cited document does not constitute prior art under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such document.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

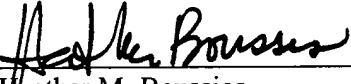
Except for issue fees payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by

Attorney Docket 051530-5008  
Application No. 10/522,810  
Page 2

this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

Dated: September 20, 2005  
Morgan, Lewis & Bockius LLP  
Customer No. 09629  
1111 Pennsylvania, N.W.  
Washington, D.C. 20004  
202-739-3000

Respectfully submitted,  
**Morgan, Lewis & Bockius LLP**

  
Heather M. Boussios  
Registration No. 52,704

INFORMATION DISCLOSURE CITATION  (Use several sheets if necessary)			Attorney Docket 051530-5008		Application No. 10/522,810		
			Applicants: Vernon L. ALVAREZ <i>et. al.</i>			Page 1 of 2	
			PTO Form 1449	Date Entry into U.S.: January 31, 2005			Group Art Unit: 1646
<b>U.S. PATENT DOCUMENTS</b>							
Initial		Document No.	Date	Name	Class	Sub-Class	Filing Date
	aa	6,028,174	02/22/2000	Ullrich <i>et al.</i>			
	ab	5,756,340	05/26/1998	Hammock <i>et al.</i>			
	ac	5,750,376	05/12/1998	Weiss <i>et al.</i>			
	ad	5,223,253	06/29/1993	Hall <i>et al.</i>			
	ae	5,212,290	05/18/1993	Vogelstein <i>et al.</i>			
	af	5,626,862	05/06/1997	Brem <i>et al.</i>			
	ag	5,905,027	05/18/1999	Ullrich <i>et al.</i>			
	ah	6,429,187	08/06/2002	Sontheimer <i>et al.</i>			
	ai	6,319,891	11/20/2001	Sontheimer <i>et al.</i>			
	aj	US 2002/0065216	05/30/2002	Sontheimer <i>et al.</i>			
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document No.	Date	Country	Class	Sub-Class	Translation
	ak	WO 97/24619	07/10/1997	PCT			
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
	al	Baker (1991) Effects of an epithelial Cl <sup>-</sup> channel blocker on whole cell voltage clamp and patch clamp recordings from a human astrocytoma in culture, <i>J. Physiol.</i> 438:128-129					
	am	Brismar <i>et al.</i> (1989) Inward rectifying potassium channels in human malignant glioma cells, <i>Brain Res.</i> 480:249-258					
	an	Brismar <i>et al.</i> (1989) Potassium and sodium channels in human malignant glioma cells, <i>Brain Res.</i> 480:259-267					
	ao	Chiu <i>et al.</i> (1989) The role of potassium channels in Schwann cell proliferation in Wallerian degeneration of explant rabbit sciatic nerves, <i>J. Physiol.</i> 408:199-222					
	ap	Deane <i>et al.</i> (1992) An alternative pathway of B cell activation: stilbene disulfonates interact with a Cl <sup>-</sup> binding motif on AEn-related proteins to stimulate motogenesis, <i>Eur. J. Immunol.</i> 22:1165-1171					
	aq	DeBin <i>et al.</i> (1991) Chloride channel inhibition by the venom of the scorpion <i>Leiurus quinquestriatus</i> , <i>Toxicon.</i> 29:1403-1408					
	ar	DeBin <i>et al.</i> (1993) Purification and characterization of chlorotoxin, a chloride channel ligand from the venom of the scorpion, <i>Am. J. Physiol.</i> 264:C361-369					
	as	De Muroalt <i>et al.</i> (1983) Reactivity of antiglioma monoclonal antibodies for a large panel of cultured gliomas and other neuroectoderm derived tumors, <i>Anticancer Res.</i> 3:1-6					
	at	Goldstein <i>et al.</i> (1986) The Blood Brain Barrier, <i>Sci. Am.</i> 255:74-83					
	au	Gray <i>et al.</i> (1986) A voltage-gated chloride conductance in rat cultured astrocytes, <i>Proc. R. Soc. Lond.</i> 228:267-288					
	av	Grissmer <i>et al.</i> (1993) Calcium-activated potassium channels in resting and activated human T lymphocytes, <i>J. Gen. Phys.</i> 102:601-630					
	aw	Hosli <i>et al.</i> (1990) Evidence for GABA-B receptors on cultured astrocytes of rat CNS: autoradiographic binding studies, <i>Exp. Brain. Res.</i> 80:621-625					
Examiner			Date Considered				
Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

INFORMATION DISCLOSURE CITATION  (Use several sheets if necessary)		Attorney Docket 051530-5008	Application No. 10/522,810
		Applicants: Vernon L. ALVAREZ <i>et. al.</i>	
		Date Entry into U.S.: January 31, 2005	Page 2 of 2
PTO Form 1449		Group Art Unit: 1646	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)</b>			
ax	Huang <i>et al.</i> (1994) Potassium channel induction by the Ras/Raf signal transduction cascade, <i>J. Biol. Chem.</i> 269:31183-31189		
ay	Jalonen (1993) Single-channel characteristics of the large-conductance anion channel in rat cortical astrocytes in primary culture, <i>Glia</i> 9:227-237		
az	Kunwar <i>et al.</i> (1993) Cytotoxicity and antitumor effects of growth factor-toxin fusion proteins on human glioblastoma multiforme cells, <i>J. Neurosurg.</i> 79:569-576		
ba	Nilius <i>et al.</i> (1992) Potassium channels and regulation of proliferation of human melanoma cells, <i>J. Physiol.</i> 445:537-548		
bb	Pappas <i>et al.</i> (1994) Reduction of glial proliferation by K <sup>+</sup> channel blockers is mediated by changes in pH <sub>i</sub> , <i>NeuroReport</i> 6:193-196		
bc	Pappone <i>et al.</i> (1993) Blockers of voltage-gated K channels inhibit proliferation of cultured brown fat cells, <i>Am. J. Physiol.</i> 264:C1014-1019		
bd	Phillips <i>et al.</i> (1994) Transforming growth factor-alpha- <i>pseudomonas</i> exotoxin fusion protein (TGF- $\alpha$ -PE38) treatment of subcutaneous and intracranial human glioma and medulloblastoma xenografts in athymic mice, <i>Cancer Research</i> 54:1008-1015		
be	Puro <i>et al.</i> (1989) Retinal glial cell proliferation and ion channels: A possible link, <i>Invest. Ophthalmol. Vis. Sci.</i> 30:521-529		
bf	Sakamoto <i>et al.</i> (1996) Identification of a new outwardly rectifying Cl <sup>-</sup> channel that belongs to a subfamily of the CIC Cl <sup>-</sup> channels, <i>J. Biol. Chem.</i> 271:10210-10216		
bg	Somogyi <i>et al.</i> (1989) Subcellular localization of benzodiazepine/GABA <sub>A</sub> receptors in the cerebellum of rat, cat and monkey using monoclonal antibodies, <i>J. Neurosci.</i> 9:2197-2209		
bh	Sontheimer (1994) Voltage-dependent ion channels in glial cells, <i>Glia</i> 11:156-172		
bi	Soroceanu <i>et al.</i> (1998) Use of chlorotoxin for targeting of primary brain tumors, <i>Cancer Res.</i> 58:4871-4879.		
bj	Soroceanu <i>et al.</i> (1999) Modulation of Glioma Cell Migration and Invasion Using Cl <sup>-</sup> and K <sup>+</sup> Ion Channel Blockers, <i>J. Neurosci.</i> 19:5942-5954.		
bk	Steinmeyer <i>et al.</i> (1995) Cloning and functional expression of rat CLC-5, a chloride channel related to kidney disease, <i>J. Biol. Chem.</i> 270:31172-31177		
bl	Uchida <i>et al.</i> (1995) Localization and functional characterization of rat kidney-specific chloride channel CIC-K1, <i>J. Clin. Invest.</i> 95:104-113		
bm	Ullrich <i>et al.</i> (1996) Human astrocytoma cells express a unique chloride current, <i>NeuroReport</i> 7:1020-1024		
bn	Ullrich <i>et al.</i> (1996) Biophysical and pharmacological characterization of chloride currents in human astrocytoma cells, <i>Am. J. Physiol.</i> 270:C1511-1521		
bo	Ullrich <i>et al.</i> (1998) Expression of Voltage-Activated Chloride Currents in Acute Slices of Human Gliomas, <i>Neurosci.</i> 83:1161-1173.		
bp	Wilson <i>et al.</i> (1993) Mitogenic factors regulate ion channels in Schwann cells cultured from newborn rat sciatic nerve, <i>J. Physiol.</i> 470:501-520		
bq	Woodfork <i>et al.</i> (1995) Inhibition of ATP-sensitive potassium channels causes reversible cell-cycle arrest of human breast cancer cells in tissue culture, <i>J. Cell. Physiol.</i> 162:163-171		
Examiner		Date Considered	
Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			